

Implementing international training programs for oncology research development

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Program**

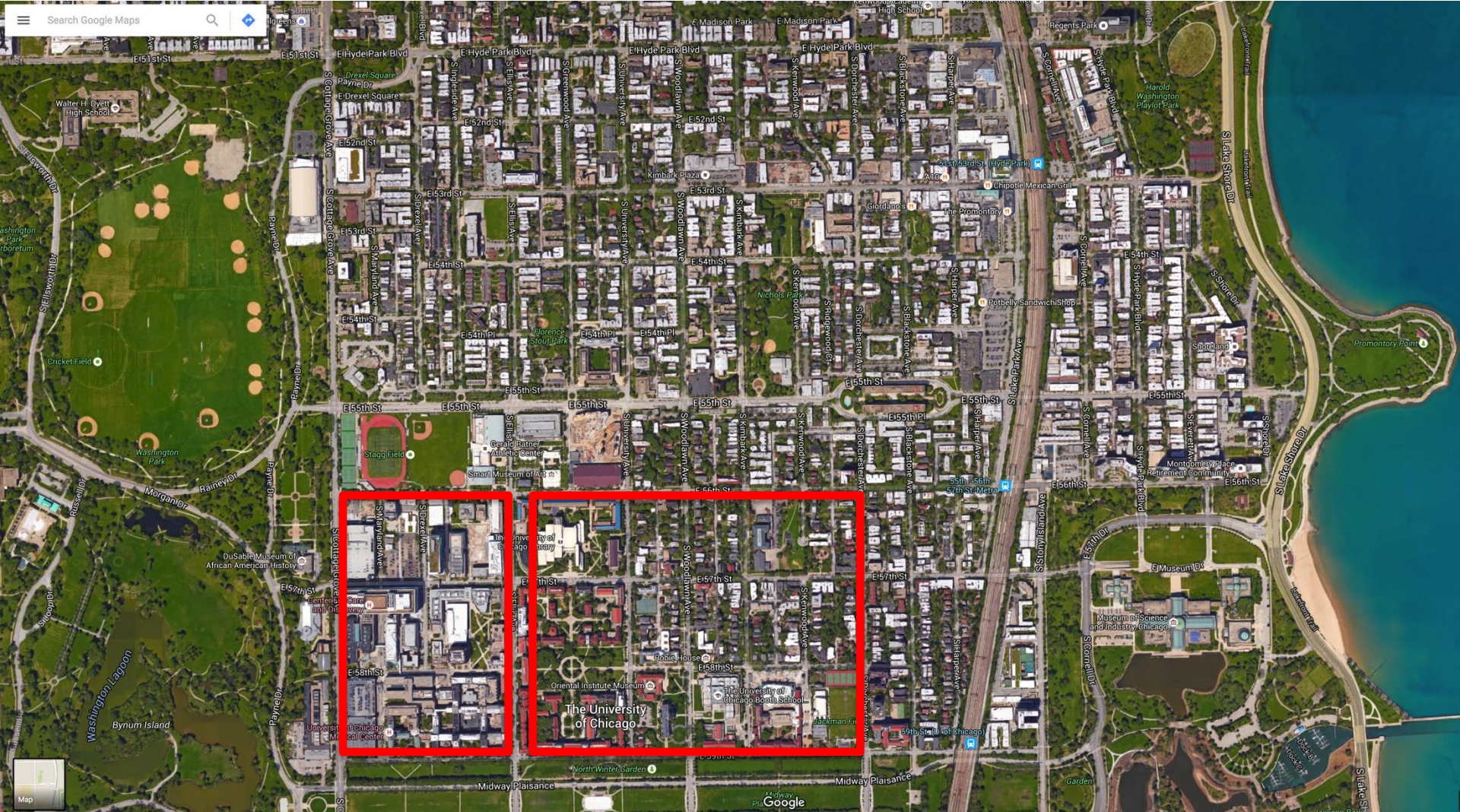
Section of Hematology/Oncology

The University of Chicago

Introduction to research training

- **Geography of the University of Chicago**
- **History of oncology research at the University of Chicago**
- **Description of our fellowship training**
- **The role of international collaboration in research training**

Integrated university and medical center campuses



University of Chicago Medical Center

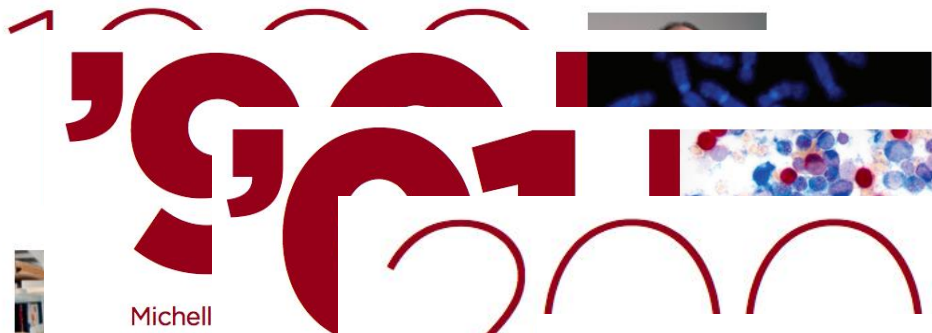


Oncology research at the university



Charles E. Scharf studies the role of the endocrine system in the development of cancer. He was the first to demonstrate that the hormone insulin-like growth factor-1 (IGF-1) is a potent stimulator of tumor growth. He was elected to the National Academy of Sciences in 1996 and received the National Cancer Institute's Distinguished Career Award in 2004.

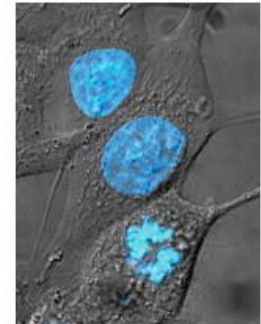
Janet Rowley discovered the first chromosome translocation in leukemia, the Philadelphia chromosome, leading to the development of the genetic therapy imatinib. She won numerous awards, including the National Cancer Institute's Distinguished Career Award in 2004 and the National Medal of Science in 2008.



Michelle Rowley discovered the first chromosome translocation in leukemia, the Philadelphia chromosome, leading to the development of the genetic therapy imatinib. She won numerous awards, including the National Cancer Institute's Distinguished Career Award in 2004 and the National Medal of Science in 2008.

Jameel M. Khan leads the World Class and Leadership Diagnostic program at the University of Chicago.

2014



Yusuke Nakamura, MD, PhD, develops a novel anti-cancer therapy targeting the T-lymphokine-activated killer cell-originated protein kinase (TOPK) and demonstrates potent activity in preclinical lung cancer studies.



THE UNIVERSITY OF CHICAGO MEDICINE

Comprehensive Cancer Center

AT THE FOREFRONT OF CANCER CARE AND DISCOVERY™

Genomic Data Commons

Center for Data Intensive Science



Vice President Joe Biden talks with Prof. Robert Grossman, director of Center for Data Intensive Science at UChicago, and Louis M. Staudt of the National Cancer Institute as they tour the Genomic Data Commons on June 6.

Photo by Robert Kozloff 



[🔗 Biden to unveil launch of major, open-access database to advance cancer research — Vice President Joe Biden to announce Genomic Data Commons project \(Washington Post\)](#)

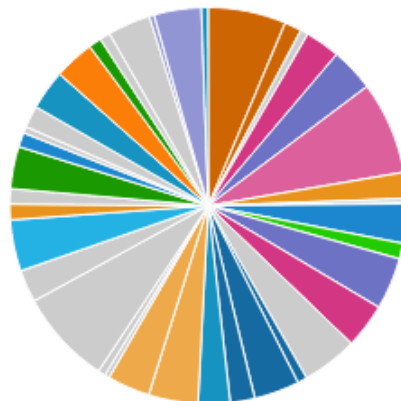
Related Links

[🔗 Science Life blog: Joe Biden visits Genetic Data Commons](#)
[🔗 Genomic Data Commons](#)
[🔗 National Cancer Institute](#)
[🔗 White House's Cancer Moonshot](#)



The Next Generation Cancer Knowledge Network

Case Distribution by Disease Type



Data Availability Summary

The NCI's Genomic Data Commons (GDC) provides the cancer research community with a unified data repository that enables data sharing across cancer genomic studies in support of precision medicine.

The GDC supports several cancer genome programs at the NCI Center for Cancer Genomics (CCG), including The Cancer Genome Atlas (TCGA), Therapeutically Applicable Research to Generate Effective Treatments (TARGET), and the Cancer Genome Characterization Initiative (CGCI).

[→ More about the GDC](#)

Hematology/Oncology Training

- **First year (12 months)**
 - Intensive oncology clinical rotations
 - Core lecture series and Friday AM seminars
 - Oncotalk communication series
 - Mentor selection (July – January)
 - Write small research project or reviews
 - Develop senior research project (Feb – June)
- **Second/third year (24 months)**
 - 6 months of clinical hematology training
 - **Fellows pursue independent research projects**
 - One to two half day continuity clinics

Additional training resources

- **Essentials of Patient Oriented Research**
- **Summer Program in Outcomes Research Training**
- **MERITS Fellowship for education**
- **Ethics Fellowship**
- **Geriatric Medicine Fellowship**
- **Masters Programs (selected options)**
 - Masters in Science for Clinical Professionals
 - Bioinformatics
 - Arts and Humanities
 - Anthropology and Sociology

Clinical Pharmacology and Pharmacogenomics Training Program

- **Clinical Therapeutics in Oncology**
 - 4 year program
 - Joins our comprehensive heme-onc program with Clinical Pharmacology and Pharmacogenomics
 - Dual certification
- **Clinical Therapeutics in Industry**
 - 4 year program
 - Dual certification
 - Specialized pharma education and research programs at Abbvie in North Chicago

Individualized fellow training paths

- **Traditional lab based projects**
- **Phase I trial experience with correlative research**
- **Investigator initiated and pharma phase I/II/III trial experience**
- **Outcomes research**
 - Young adult and survivorship
 - Economics and health policy
 - Geriatric Oncology (SOCARE clinic)
 - Sociology/Anthropology
 - Healthcare disparities research

Center for Global Health (CGH)

- **Leadership**

- Olufunmilayo Olopade, MD, FACP, Professor of Medicine and Director of the Center for Clinical Cancer Genetics

- **Mission**

- To collaborate with communities locally and globally to democratize education, increase service learning opportunities, and advance novel, transdisciplinary, and sustainable solutions to improve health and well-being while reducing global health disparities and inequalities

CGH Research Niche Areas

- **Health, environment, and vulnerable populations**
- **Genomics and chronic non-communicable diseases**
- **Urban health services and systems delivery**
- **Women's and children's health and well-being**
- **Partnership with the MacLean Center for Clinical Medical Ethics**

Training opportunities for Univ of Chicago students and trainees



Benefits of international exchange and research training

- **Trainee access to novel and unique training resources**
- **Two way exchange of clinical and research practices**
 - “Trainee as teacher”
- **Creation of long term collaborative foundations for research**
 - Research reagents and techniques
 - Shared databases and heterogeneous tumor banks
 - International multi-institutional clinical trials
 - Formal training exchanges can foster long-term informal exchanges between labs and clinical research teams

Summary

- **Wide array of training resources**
- **Mentors with experience in a variety of research activities and training**
- **Goal is to help train the next generation of clinician researchers**